

ventilation port (122) to communicate air between an interior region in the fluid ejection system and ambient, at least one spill over region (190, 192, 194, 196) to communicate the fluid with the second container, and a plurality of channels (137, 138) to communicate the air from the ventilation port between the interior region and the second container, wherein each channel provides a different path capable of channeling air from the ventilation port to the second container (emphasis added). Method claim 11 recites a method of ventilating air using such structure.

As admitted during the November 21 personal interview and acknowledged on page 4 of the Office Action, Carrese fails to teach at least "a plurality of channels to communicate at least the air from the ventilation port between the interior region and the second container, wherein each of the plurality of channels provides a different path capable of channeling air from the ventilation port to the second container" as recited in independent system claims 1 and 10 and similarly recited in independent method claim 11. Instead, it suffers the problem that when the overflow region receives ink, such as from a tipping of the cartridge, it is possible that proper venting will be prevented.

Hattori fails to overcome the deficiencies of Carrese with respect to these claims. In particular, in support for the rejection, the Office Action relies on (1) element 12 of Hattori being a ventilation port, (2) element 50 as the second container, and (3) presumably communicating pipes 14 in Fig. 17A as corresponding to the plurality of channels. Applicants respectfully submit that this assertion is factually flawed and inconsistent with teachings of Hattori. Applicants thus respectfully assert that a *prima facie* case of obviousness has not been made.

With respect to element 12, Fig. 1B and col. 7, lines 1-27 clearly identify element 12 as an ink supply port that communicates with recording head 60 and supplies ink to the head. This is not a ventilation port that communicates with ambient air as required by Applicants'

claims. Thus, the Patent Office misconstrues the teaching of Hattori. One of ordinary skill in the art would instead recognize that the atmosphere communicating vent port in Hattori is port 15 located at the top left of chamber 10 (Fig. 18) that communicates with external air. However, this is provided in and communicates directly with chamber 10. Thus, such a vent port is entirely different than claimed and would not face problems with blockage in spill over regions since this specific design allows for spillage by the direct connection of vent 15 with chamber 10. Moreover, Hattori clearly provides only a single opening (port 15) that provides a single large path that communicates ambient air to the ink container (10). Thus, Hattori fails to teach "a plurality of channels to communicate at least the air from the ventilation port between the interior region and the second container, wherein each of the plurality of channels provides a different path capable of channeling air from the ventilation port to the second container" as recited in independent system claims 1 and 10 and similarly recited in independent method claim 11.

With respect to element 50, the Office Action alleges that this element corresponds to the claimed second container. However, Applicants' second container as claimed is the one having a capillary medium. Container 50 has no capillary medium. The only capillary structure is buffer member 16 disposed within container 10 in the vicinity of atmosphere port 15. Thus, the Patent Office again misconstrues the teaching of Hattori or is ignoring specific claim requirements that define what the second container is.

With respect to alleged pipe 14, at best, alleged pipe 14 (which is two pipes in Figs. 17A-B) corresponds to Applicants' wetted passage or Carrese's passage (132, 232), which transfer wetted liquid between the two containers. Thus, even though two passages are taught in Fig. 17, these passages are for an entirely different purpose than the claimed structure and are not for the purpose of venting atmospheric air through multiple passages. Accordingly, even if combined with teachings of Carrese, the combination would teach at best that there

should be multiple wetted passages (132, 232) in Carrese's Fig. 2 or Fig. 4 embodiment for the purpose of ensuring proper ink delivery between the two containers.

Hattori does not appreciate problems recognized and solved by Applicants' claimed systems and method. Hattori clearly provides only a single opening (port 15) provided on the wall face that provides a single (very short) path that directly communicates ambient air to the chamber 10. Thus, if the ink supply system of Hattori were tipped over, ink would appear to leak out because of the lack of a spill over region or communicating path of any length. Upon righting of the supply system, there would be no possible blockage. Thus, problems with spilled ink blocking the air supply passage are not appreciated by Hattori. Because of this, Hattori provides no possible motivation to provide a plurality of air communicating channels that communicate with ambient as claimed. The only possible source of motivation is impermissible hindsight consideration of Applicants' specification.

Based on the above, because there is no appreciation of the problem with venting atmospheric air, one would not have looked to Hattori. Moreover, when read "as a whole" Hattori teaches against combination with Carrese or is completely incompatible with Carrese. This is because Hattori fails to provide a spill over region or a small tortuous air communication channel as in Carrese. Thus, the air channel structure of Hattori is incompatible with Carrese. That is, Carrese provides a long, tortuous, and narrow single air communicating path from vent port 260 to the second chamber to prevent ink leakage. However, this solution to prevent leakage causes the problem with the availability of atmospheric air if ink does travel to the path. Contrary to this objective, Hattori provides a direct connection of the second chamber 10 to ambient by providing air port 15 directly on a top wall of the second chamber 10. This completely eliminates the tortuous path of Carrese and allows leaks of fluid, but arguably would prevent any blockage of venting because no overflow passage that could trap ink within the air path is provided. Thus, the two vent and

path structures cannot be combined or modified without destroying the intended purpose of either reference.

Accordingly, independent claims 1, 10 and 11 and claims dependent therefrom define over Carrese, even if combined with Hattori. Dependent claims 2-9 and 12-17 are allowable for their dependence on allowable base claims and for the additional features recited therein. Withdrawal of the rejection is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-17 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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